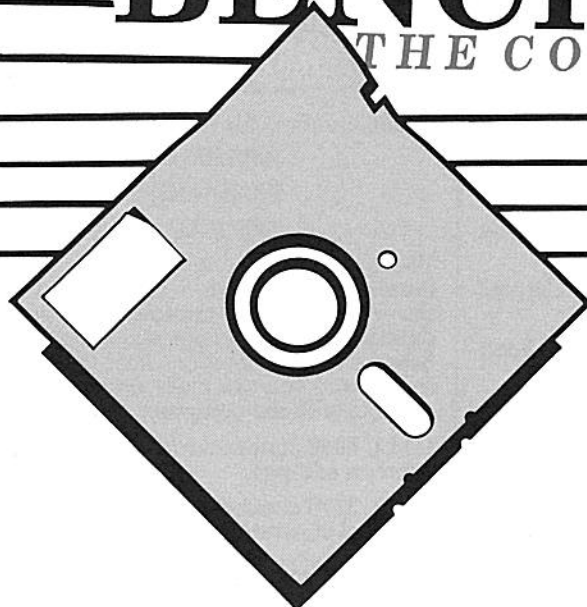


BENCHMARKS

THE COMPUTING CENTER



NORTH TEXAS STATE UNIVERSITY

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SERVICES AVAILABLE TO USERS OF THE NTSU COMPUTING FACILITIES

The NTSU Computing Center is located in the Information Sciences Building (ISB), Room 119. Phone Numbers: Computing Center: (817) 565-2324; Help Desk: 565-4050; Graphics Lab: 565-3479

BENCHMARKS Questions/Contributions, Etc - Claudia Lynch

Information & ID-Codes; Disk Space Problems - Carolyn Goodman

Statistical/Research Support - George Morrow, Scott Barber, Claudia Lynch, Panu Sittiwong, Jim Aman

Academic ADABAS/COM-LETE - Sean Widmer

CRSP & COMPUSTAT Problems - Panu Sittiwong

Student Programming Problems - CSCI Dept., GAB Room 542A; BCIS Dept., BA Room 152

JCL Problems; Password & Operating System Problems; Communication/Terminal Problems - Help Desk

Data Entry; Test Scoring & Analysis - Betty Grise

Administrative Applications - Coy Hoggard

Printout Retrieval - RJE Operators

DIALING UP NTSU COMPUTERS OVER THE TELEPHONE

Phone numbers for the Local Area Network (LAN) are:

300/1200 BAUD: (817) 565-3300; 3499

300 BAUD: D/FW METRO 429-6006

1200 BAUD: D/FW METRO 429-9314

The numbers that will accept either 300 or 1200 baud communications have an autobaud feature that requires you to hit the <RETURN> key repeatedly so that the receiving modem can determine the appropriate baud rate. When you have established a communications link, the # prompt will appear on your screen and you can enter one of following CALL commands to connect with the computer of your choice.

CALL 8040 connects with the NAS/8083 (does not support full-screen editing).

CALL 3270 connects with the NAS/8083 through a 3270 protocol converter (supports full-screen editing).

CALL DEC connects with the VAXcluster

CALL 780 connects with the Research VAX

CALL 3000 connects with the Libraries' HP-3000

NTSU CABLE SYSTEM SCHEDULE

The current configuration of the NTSU cable system is as follows:

Channel 7 - NT Daily. Broadcasts from the NTSU Journalism Department.

Channel 8 - TAGER. Broadcasts go to and from NTSU to other links in this microwave network.

Channel 10 - NTSU Computer System Status Monitor (SSM). Displays the current status of the NAS, VAX, and HP computer systems supported by the Computing Center.

Channel 12 - Sammons Cable. Carries Cable News Network (CNN) unless a special program is requested.

Special broadcasts to and from classrooms can be arranged by the Media Library (565-2484).

HOURS FOR NTSU COMPUTER ACCESS AREAS : FALL 1987*

Location	Times	Days
Computing Center RJE	Noon-Midnight 7 a.m.-Midnight 7 a.m., Tuesday-Midnight, Saturday (Open 24 hours/day)	Sunday Monday Tuesday-Saturday
ISB 110 Terminal Area	2-10 p.m. 7:30 a.m. - Midnight 7:30 a.m.-6 p.m. 9 a.m.-6 p.m.	Sunday Monday-Thursday Friday Saturday
College of Business	Noon-11:45 p.m. 8:15 a.m.-11:45 p.m. 8:15 a.m.-7:45 p.m.	Saturday, Sunday Monday-Thursday Friday
GAB 550C	2 p.m.-Midnight 8 a.m.-Midnight 8 a.m.-5 p.m. 2-8 p.m.	Sunday Monday-Thursday Friday Saturday
Graphics Lab	1-11 p.m. 8 a.m.-11 p.m. 8 a.m.-7 p.m. Noon-5 p.m.	Sunday Monday-Thursday Friday Saturday

*Hours may vary. Check MUSIC/VAX News and/or posted schedules for exceptions.

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GENERAL INFORMATION

Classroom User-ID Codes to be Deactivated

By Carolyn Goodman, Computing Center Administrative Services

Can you believe the Fall semester is almost over and Christmas is just around the corner? With the end of the Fall semester comes the deactivation of all classroom User-IDs, which will occur on December 19, 1987. Should you wish to retain files that you have accumulated over the last few months, you will need to apply for an **individual student User-ID**. This will allow you to transfer those files you wish to keep to a new User-ID. **Classroom User-ID codes cannot be retained across semesters.**

The blue "NTSU COMPUTING CENTER NEW USER-ID REQUEST FORM"s are available from the Computing Center Main Office (ISB 119). These should be appropriately completed and signed by both a faculty member and the department head or account authority. Individual User-IDs are active through August 31, 1988.

The Computing Center is here to assist with all your computing needs. Help in completing the request form, as well as general computing information, can be obtained by calling the Computing Center at 817-565-2324.

Another source of information is the Help Desk, located in ISB 110 (in the Science Library), 817-565-4050. The Help Desk should be contacted if you need assistance changing a password, or have other computing difficulties. If you need help in identifying your password, you must come, in person, to the Computing Center Main Office, ISB 119. (Please be sure to have your Student or Faculty/Staff ID with you.)

Have a Healthy and Happy Holiday Season!! §

Desktop Publishing User's Group Formed

A user's group encompassing the Dallas/Fort Worth area has been formed to share information on desktop publishing. The group, *Dallas/Fort Worth Desktop Publishing User's Group*, is affiliated with the national *Ventura Publisher's User's Group*. The focus of the group, however, is not limited to the Ventura product.

Meetings are held the second Tuesday of each month at InfoMart in Dallas. For more information, contact the User's Group at 10670 N. Central, Suite 110, Dallas, TX 75231 (214) 361-5578. §

234-1769

NTSU Libraries' Bibliographic Data Base Available On-line

By Jeanette Mann, NTSU Libraries Computer Operator

It is now possible for anyone who has access to the Local Area Network to dial into the NTSU Libraries' bibliographic data base system. Please follow the steps below to access the Libraries' bibliographic data base.

- 1.) If you are a microcomputer user, it may be necessary to change some parameters in your particular communications program (such as PROCOMM), before connecting to the Local Area Network. The parameters to change are **PARITY** and **DATA BITS**. They should be set to either:

PARITY = NONE
DATA BITS = 8

or

PARITY = SPACE
DATA BITS = 7

Depending on your communications program, it may be necessary to change other settings in addition to **PARITY** and **DATA BITS**. If you experience other types of problems, please call William Floyd at 565-2689 for assistance.

- 2.) You are now ready to "call" the Libraries' computer. At the # prompt you should enter:

CALL 3000 <RETURN>

Please refer to page i of *Benchmarks*, "Dialing up NTSU Computers Over the Telephone," for more information on accessing the Local Area Network over the telephone.

- 3.) One of two displays will now show on your screen. If you are the first user to dial into the specific network port you will see the following screen:

Virginia Tech Library System IV.1

Virginia Tech Foundation, Inc. (c) 1984

- 1) H/P with ALA character set
- 2) H/P with non-ALA character set
- 3) Concept HDS with ALA character set
- 4) TELERAY with ALA character set
- 5) OTHER

Please enter line number of TERMINAL TYPE

At this point, you should type **5** and hit the <RETURN> key for terminal type OTHER. You will then see the next screen:

```

*****
* Welcome to the Virginia Tech Library System (VTLS) *
*              (RE:LEASE IV.1)              *
* VTLS is a proprietary library software product *
* of the Virginia Tech Foundation, Inc.      *
*              Blacksburg, Virginia 24061    *
*****
Please enter LOCATION CODE

```

At this point you should enter:

3000 <RETURN>

The following message will appear on your screen:

```

LOCATION is PUBLIC REMOTE ACCESS
PLEASE REMEMBER TO IDENTIFY YOURSELF FOR DATA
ENTRY
Please enter 'HELP' if you need assistance or '?' for the NOVICE
USERS MENU.

```

You can now enter:

/HELP <RETURN>

to obtain the general Help Screen.

- 4.) If you are not the first user to dial into the specific network port, the following message will appear instead of the displays shown in step 3 above:

```

INVALID COMMAND -- TRY AGAIN OR Please enter 'HELP'

```

You can now enter:

/HELP <RETURN>

to obtain the general Help Screen.

- 5.) To close your session, "escape" to the Local Area Network by pressing <ESC> <DELETE> or <ESC> <RETURN> and typing **DONE** <RETURN> <RETURN>

Again, problems accessing the Libraries' bibliographic data base should be referred to William Floyd at 565-2689. §

Time-out Instituted on 3270 Lines

If you haven't read MUSIC News lately, you may not be aware that a time-out procedure has been instituted on the 3270 protocol converter ports. If no activity (typing at the keyboard or listing lines on the screen) occurs on your terminal for 30 minutes, your network session will be closed automatically. It is hoped that this will allow more people to access MUSIC and CMS through the **CALL 3270** command. §

Spotlight on MUSIC 1.2, Part III - The Context Editor

By Philip Baczewski, MUSIC Time-share Coordinator
(AC12@NTSMUSIC)

NOTE: This is the third in a series of articles highlighting some of the important new features of MUSIC/SP Release 1.2 which is tentatively scheduled for installation at NTSU in January 1988. This series is intended to provide introductory information to assist NTSU faculty, students, and staff in planning for the changeover to this new version of MUSIC.

Introduction

The MUSIC/SP context editor is one of the most heavily used MUSIC utility programs. Whether you are preparing a program for submission to OS/MVS or entering text into a file, the editor is central to the use of MUSIC at NTSU (soon to be "The University of North Texas"). Since the first installation of MUSIC, we have seen many changes and improvements to the editor, and MUSIC release 1.2 continues refinement of this tool.

New PF Key Assignments

The most obvious change to the context editor in MUSIC 1.2 is the redefinition of PF keys for full-screen editing. In order to make MUSIC compatible with other IBM interactive operating systems, the editor PF keys 13 through 24 are defined to be the same as PF keys 1 through 12. Additionally, the "standard" IBM definitions are used for certain keys, for example, <PF1> will invoke the help facility, <PF3> will end the editing session, <PF7> will scroll up one page, and <PF8> will scroll down one page. <PF9> in the MUSIC 1.2 editor still issues a LOCATE command, <PF10> inserts one line, <PF11> enters input mode, and <PF12> places the cursor on the command line. The following is a comparative listing of old and new PF keys.

PF key	MUSIC 1.2 Definition	Previous Definition
PF1	HELP	UPWINDOW 6
PF2	SPLIT	UPPAGE
PF3	QUIT	TOP
PF4	MARK	DOWNWINDOW 6
PF5	CENTER	DOWNPAGE
PF6	DELETE	LAST
PF7	UPPAGE	DELETE 1
PF8	DOWNPAGE	SPLIT
PF9	LOCATE	LOCATE
PF10	INSERT	INSERT
PF11	INPUT FLIP	INPUT FLIP
PF12	CMDPFK	CMDPFK
PF13	HELP	QUIT
PF14	SPLIT	WINDOW FLIP
PF15	QUIT	NUM FLIP
PF16	MARK	NULLS FLIP
PF17	CENTER	(UNDEFINED)
PF18	DELETE	(UNDEFINED)
PF19	UPPAGE	MDELETE 40

PF key	MUSIC 1.2 Definition	Previous Definition
PF20	DOWNPAGE	JOIN
PF21	LOCATE	DUP
PF22	INSERT	MINSERT 2 B
PF23	INPUT FLIP	MINSERT 10
PF24	CMDPFK	(UNDEFINED)

If you wish to maintain the old PF key default settings, you may do so by creating a file called **EDITOR** in your save library that includes the old PF key definitions. For example:

```
/INC *COM:EDITOR
DEFINE PF1 UPWINDOW 6
DEFINE PF2 UPPAGE
DEFINE PF3 TOP
DEFINE PF4 DOWNWINDOW 6
```

The EDIT Command

In addition to the changes in PF key definition, the **EDIT** (and **TEDIT**) command has a few additional options that may be used when issuing the command. Typing **EDIT filename RO** will start a Read-only edit session on file **filename**. This use of the **EDIT** command is functionally the same as the **MUSIC 1.2 BROWSE** command (see Part II of this series, "Commands and Job Control Statements," in the November issue of *Benchmarks* for more information). The **EDIT** command also allows the use of the **UIO** and **MAX(n)** options. **UIO** causes the file to be read by 512-byte blocks. This allows you to edit files with a record format of U or files which cannot be read sequentially. **MAX(n)** specifies the maximum number of records to be read from the file.

New Editor Commands

Several new commands are provided in the **MUSIC 1.2** version of the editor. The **CASE** command allows you to specify whether upper and lower case will be respected or ignored during use of a **CHANGE**, **LOCATE**, or **SCAN** command. If you specify **CASE IGNORE** before a **LOCATE** command, for example, by specifying the locate string **abc**, you would also find **ABC**, **ABc**, **AbC**, etc.

The **CENTER** command will place either the current line or the cursor line at the center of a full-screen edit display. As with other full-screen editor commands, the current line (indicated by the arrow in the left-hand column) is affected when the cursor is on the command line, and otherwise the action is performed on the line where the cursor sits. As indicated above, in the **MUSIC 1.2** full-screen editor, **<PF5>** is defined to be **CENTER**. You could therefore move your cursor to any line on the screen, press **<PF5>** and that line would be moved to the middle of the screen.

The **CURSOR** command controls the output cursor location in full-screen editing. For example, typing **CURSOR END** from the command line would place the cursor at the end of the current line (indicated by an arrow). Entering

CURSOR LOCATE will cause the cursor to stay at the start of a found string after any subsequent **CHANGE**, **LOCATE**, or **SCAN** commands.

The **MUSIC 1.2** editor offers a facility to extend the ability to manipulate a file's contents through use of **MACRO**s written in the **REXX** language. A **MACRO** is a set of commands which can be invoked to perform a specific function. The **REXX ON** command enables the use of **REXX** command procedures from the editor. For example, with **MUSIC 1.2**, it will be possible to write a **REXX MACRO** to display a library listing from the editor. The **MSG** command can be used in a **REXX MACRO** to enable or disable the display of editor messages generated when using certain editor commands.

Another useful new command is **STORE**. Blocks of editor lines can currently be "marked" and manipulated in several ways. Marked lines can be copied, moved, or deleted all in one block. In **MUSIC 1.2**, blocks of marked lines can also be stored to a **MUSIC** save library file using the **STORE** command.

One final addition to editor commands is **SUBSET**. The subset command in **MUSIC 1.2** will allow you to switch between normal edit mode and read-only ("browse") mode. Entering **SUBSET 2** will place you in read-only mode, and no modifications will be allowed to the file. **SUBSET 0** will return you to normal edit mode and allow you to make changes in the file.

In Conclusion...

The above changes to the editor are fully documented in the *MUSIC 1.2 User's Reference Guide*, which will be available in the University Store in the Spring Semester. Additionally, user support will be available from the Help Desk and Academic Computing Services to aid you in using new editor features, or in customizing your editor to work the way in which you are accustomed. We also anticipate that the addition of **REXX MACRO**s, which will be the subject of the next article in this series, will provide a more powerful editing environment. §

Comfort Tips for Computer Users

By Sandy Franklin, Office Automation Specialist

The Heath Information Library, division of Krames Communications, published a booklet titled "Fitness at the Terminal - Comfort Tips for Computer Users." Capsulized, it contained the following information.

You can make using computer terminals a more comfortable partnership by preventing minor muscle tension, stiffness, aches, fatigue, and eyestrain resulting from sitting at your terminal for extended periods of time. Try following a simple **right-at-the-terminal** fitness and comfort program.

You don't have to be an athlete or a body builder to be fit or have a lounge chair to be comfortable at your terminal. You can start an easy-to-do program of good posture, comfort exercises, and eye care.

Good Posture

Sitting in one position for a long time causes muscle tension, stiffness, and aches in your body. You can minimize the stress on your back by using good sitting posture - maintaining the three natural curves of your spine. Changing your posture habits may take a little practice but the payoff is feeling more comfortable at your computer.

Good posture means keeping your three natural spinal curves aligned: cervical (neck), thoracic (upper back), and lumbar (lower back). To maintain these curves, imagine a plumb line running through your ears, shoulders, and hips with the top of your screen at forehead level. Slouching or reaching strains these natural curves.

Use a lumbar support to relieve strain in your lumbar (lower back) curve. You can use a lumbar roll or a tower rolled up to 4-6 inches. Place it in the small of your back.

Adjust your chair height so that your weight is shifted forward off your spine and your arms are at desk level. You may need a small wedge on your seat.

Shift your position throughout the day to keep your muscles loose and to relax away tension due to immobility. Be sure your spine stays aligned.

Keep your feet flat on the floor to help maintain good sitting posture and aid circulation in your legs. If they don't reach the floor, use a footrest.

Comfort Exercises

During a day of sitting in front of your computer with your arms extended to the keyboard, **muscle tension and stiffness** can build up in your neck, back, shoulders, hands, wrists, and even fingers. It only takes minutes, however, to prevent these discomforts you can do at your terminal.

Start with two simple warm-ups, then do the comfort exercises right at your terminal. They are short and simple so you can fit them into your work schedule.

NOTE: If any of these exercises cause dizziness or discomfort, check with your doctor.

Warming Up:

Warming up helps you relax, loosens tense muscles, and increases blood circulation to give you an energy boost.

Deep breathing draws fresh air deep into your lungs while reaching high stretches stiff muscles.

Deep Breathing - Inhale through your nose and exhale through your mouth, letting your stomach expand and contract. Repeat six times.

Reaching High - Raise your arms over your head, stretching as high as you can. Then bring your arms back down. Rest a moment. Repeat two times.

For the Neck:

(To relieve a stiff neck...)

Neck Glide - Glide your head back, as far as it will go, keeping your head and ears level. (Doing it correctly creates a double chin.) Now glide your head forward. Repeat three times.

For the Upper Back:

(To relieve shoulder and back tension...)

Upper Back Stretch - Raise your hands to your shoulders. Using your arms, push your shoulders back. Keep your elbows down. Hold for 15 seconds. Repeat three times.

For the Lower Back:

(To relieve lumbar pressure...)

Lower Back Stretch - Make sure your chair is stable if it has rollers. Lower your head and slowly roll your body as far as you can toward your knees. Hold for 10 seconds. Push yourself up with your leg muscles. Repeat three times.

For the Shoulders:

(To relieve shoulder stiffness...)

Arm Circles - Raise your arms to the sides, elbows straight. Slowly rotate your arms in small circles forwards, then backwards. Lower your arms, then repeat three times.

For the Hands and Wrists:

(To relieve hand and wrist tension...)

Wrist Flex - Put your right elbow on a table, hand raised. With your left hand, gently bend your right hand back toward the forearm. Hold 5 seconds. Repeat on the other side.

For the Fingers:

(To relieve hand and finger tension...)

Finger Fan - Hold your hands out in front of you, palms down. Spread your fingers apart as far as you can. Hold for 5 seconds, then make a tight fist. Repeat three times.

Eye Care

Using your eyes doesn't harm them. But focusing on a computer screen for long periods can cause temporary eye discomfort. The muscles that move and focus your eyes become strained. Your eyes become dry and itchy. So take care of them: get regular eye exams to be sure your eyes are healthy and vision problems are corrected. And practice eye comfort tips to prevent everyday eye strain.

Regular Eye Exams - Uncorrected vision problems can cause unnecessary eye strain and headaches. Have regular eye exams to learn if you need corrective glasses or contact lenses. Tell the doctor you work at a computer terminal.

As you age, you may develop **presbyopia**, a condition in which the lens of the eye is unable to focus at close range. If you wear **bifocals**, which correct for presbyopia, you may find you have to tilt your head back to see the computer screen through your bifo-

cal. This can cause a stiff neck. A separate pair of glasses for close range might work better. You can also try rearranging your terminal screen so that it is directly in front of your keyboard rather than on top of the system unit. This way you will be looking down at the screen rather than having to tilt your head back to see it.

Eye Comfort Tips

When you focus on your screen for extended periods of time, your eyes can become strained, dry, itchy, and tired. You can quickly relieve these problems with a few simple eye comfort techniques. They take only seconds to do.

Blinking - To keep your eyes moist, prevent itching, and aid in cleaning, blink them often.

Reducing Glare - To reduce reflection and glare from your screen, reposition your terminal, tilt the screen, or modify the lighting.

Palming - To rest your eyes from the light, shape your hands into shallow cups and place them lightly over your closed eyes. Hold them there for one minute.

Refocusing - To exercise the muscles that focus your lenses, periodically look away from the computer screen and focus on an object at least 20 feet away. Repeat three times.

Eye Rolling - To exercise the muscles that move your eyes, roll your eyeballs around clockwise three times, then counterclockwise three times. Make wide circles.

Use Comfort Tips for Life

The tips you've learned for comfort at the terminal can help you be comfortable on the job, too. Whenever you're sitting for extended periods, you can use good posture. You can take a few moments to do your comfort exercises to prevent muscle strain and stiffness. And whenever you're focusing at close range a lot, you can use your eye comfort tips to reduce eyestrain and fatigue.

You're probably enjoying your computer. It makes you more efficient, faster, and productive - but only if it is a comfortable partnership. By taking easy-to-do steps to prevent the temporary discomfort, you can be fit and comfortable at your terminal. §

Electronic Publishing Day at INFOMART

January 14, 1988 is Electronic Publishing Day at INFOMART in Dallas. The theme for January is "Desktop Presentations." The day begins at 8 a.m. with registration and lasts until about 4:30 p.m. You can attend any product center presentations you are interested in and are not obligated to purchase anything. EPOCENTER at INFOMART is responsible for this FREE service. For more information or to register call: (214) 746-INFO or (800) 367-7100§

BENCHMARKS FORUM

BENCHMARKS Forum is intended to serve as a vehicle for answering questions that may be of general interest to the user community. If you have a question, please send electronic mail to the Benchmarks editor (AS04@NTSMUSIC) or write it down and drop it by the Computing Center. Deadlines permitting, we will try to answer it in the next issue.

Question: *When I change the pitch setting in WordPerfect, I get unpredictable results. Sometimes the left margin changes and sometimes the pitch doesn't change at all. What is wrong?*

Answer: First of all, you must realize that WordPerfect calculates the left margin based on the current pitch setting (# of characters per inch). Thus, if WordPerfect is set for 10-pitch and a left margin of 10, the left margin will be one inch wide (assuming the printer paper is aligned so that printing begins at the leftmost edge of the paper.) If you change pitch to 15 and keep the left margin of 10, then the left margin will be 2/3 of an inch. Therefore, to maintain a left margin of one inch, change the left margin to match the pitch setting.

Version 5.0 of WordPerfect (recently announced for release in Spring, 1988) will automatically adjust margins with pitch changes. In the meantime, if you change fonts and pitches often, you can set up macros to change fonts, pitches, and margins with one quick command. If you have not used macros before, don't worry, it is surprisingly easy (see "Speeding up Your WordPerfect Work" in this issue).

If the pitch doesn't change, there are several possible causes. First of all, check the **Reveal Codes** screen by pressing <ALT> <F3> to make sure that the pitch change command was correctly placed and that there are no contradictory commands (e.g. one that changes the pitch again) following it. If everything looks OK, make sure that you are using the correct printer definition. Select **Printer Control (4)** from the **Print** command menu <SHIFT> <F7>. From this menu, you can display the printers and fonts installed (2), and the active printer number (1). From here, you can change the printer number (Select Printer Options) or use **Select Printers (3)** to install new printer definitions.

If that looks OK, then print out the **PRINTER.TST** file which comes on the WordPerfect **LEARN** diskette. This will demonstrate how well the installed printer definition works on your printer for font and pitch changes, underlining and boldfacing, etc. If you do not get different pitches, or some other features that your printer is supposed to have, then you may need to examine the printer definition for the printer.

Customizing printer installation is not difficult as long as you have a manual for the printer which details the codes for the different features, such as pitch changes, draft or quality printing, etc. Place the file **PRINTER.EXE** (also from the **LEARN** diskette) in the same sub-directory with **WPRINTER.FIL** and **WPFONT.FIL**. Typing **PRINTER** from the DOS prompt will bring up the WordPerfect Printer Definition Program menu.

From there, you may choose to edit the configuration of your printer or first request information on the use of this program.

You will notice within this program that there are only three pitch changes supported directly. They are labeled 10, 12, and 15-pitch. If your printer does not have a code for 15-pitch, but does have one for compressed print, then you may want to put that code in the 15-pitch slot. This will allow you to produce compressed print by changing to 15-pitch within the document. Also check the font change codes, because often there will be pitch change codes embedded there. For example, font three may be set up for draft printing, with an italic character set, at 12 pitch. Changing to this font, then, will override any previous pitch change commands.

The printer definition program is menu-driven, so it is easy to use, but make sure you have the printer manual handy! Remember also that Computing Center consultants can help you edit this configuration, if you run into problems.

Question: *How can I find out the size of my MUSIC file?*

Answer: There are two commands that you can use to see the size of a MUSIC file. The `/ATTRIB` command will show you the attributes of a single file. You can shorten this command to simply `AT`. For example, to view attribute information on the file named `test`, you would type `AT test`. MUSIC would then display such information as the file's logical record length and record format, and also the amount of space (in K) that the file occupies and the number of lines in the file.

Another way to see the size of the file called `test` is to use the `/LIBRARY` command. To view a full listing of information on only the file `test`, you could type `LIB N(test) F`. You would then see the file's size (in K) as well as other information such as record format and record size.

Question: *Our office has a Hewlett Packard LaserJet Series II laser printer and we would like to be able to share it between several NT PCs. What is the best way to accomplish this?*

Answer: The answer to this question depends on several factors including the number of PCs to be connected, the physical arrangement of your office, the software applications you are using, and the amount of money you have to spend.

The simplest solution to your problem is to run printer cables from each PC that needs to share the printer to a mechanical switch. The switch has one line that runs to the laser printer and two or more lines attached to PCs. When you need to use the printer, you walk over to the switch and turn a knob to establish a physical connection between your PC and the printer. These devices are relatively inexpensive (\$50-\$150), but they can present some problems related to cabling if the PCs and printer are geographically dispersed.

A second, slightly more flexible solution is the use of an intelligent printer buffer. These devices are similar to

mechanical switches except the switching takes place electronically without the need to physically turn a knob. In addition, printer buffers usually include internal memory that allows you to "spool" your printed output to the buffer. This allows you to go on with your work while your file is being printed. Note, however, that some word processing programs, such as WordPerfect, have this feature built-in. Thus, if this is your primary application, an intelligent buffer may not be very advantageous. The cabling problems alluded to above also apply to printer buffers. These devices usually cost between \$200 and \$400 plus the cost of cabling.

A third solution involves the installation of a serial communications network. These networks involve the stringing of cables between the serial ports of the PCs to be attached. Software is then run on each PC allowing any computer to share its resources with the other PCs on the network. In addition to printer sharing, these networks can be used to exchange files between PCs (at relatively slow speeds) and to pass messages such as electronic mail. They are quite flexible, relatively inexpensive (\$100-\$200 per PC plus the cost of cabling), and reasonably easy to use.

The last, and most elegant, solution to your problem would be to install a Personal Computer Local Area Network (LAN) in your office with the laser printer attached to a dedicated PC acting as a file/print server. This would allow any PC attached to the LAN to easily redirect its printer output to the laser printer. In addition, since the printer output is "spooled" to the file server's memory prior to printing, you will be able to work on your PC while the file is being printed. Most LANs print a header page including the user's name and the file name prior to printing a file to allow you to identify your output. While this solution is the most technologically advanced, it is probably not very cost effective unless you have other needs that justify the installation of a LAN such as multiuser database applications or electronic mail/scheduling. A typical LAN will cost approximately \$5,000 plus an additional \$400-\$500 for each PC attached to the LAN. \$

Benchmarks Reader/User feedback is encouraged. Send all letters, suggestions, etc. to (AS04@NTSMUSIC) or:

**North Texas State University
The Computing Center
NT Station, Box 13495
Denton, Texas 76203
Attn: Benchmarks Editor**

MICROCOMPUTERS

Speeding up Your WordPerfect Work

By Scott Barber, Academic Computing Services Staff
(AC10@NTSMUSIC)

You probably know that WordPerfect is a very "powerful" word processor. Features such as the spelling checker, thesaurus, automatic footnoting, endnoting, indexing, mail-merging, etc. help make it one of the more capable packages available. This article is meant to show you how quickly and easily you can "get around" in WordPerfect. I will deal with a few simple ideas for getting on-line help and speeding up cursor movement.

Getting On-line Help

One of the very first things you should know about WordPerfect is the "Help" key, <F3>. Pressing this key puts you in the "Help" system. The next key you press determines the topic on which you will get help. Until you press <RETURN> or the <SPACE BAR>, you will keep getting "Help" by pressing different keys. This includes not only the standard function keys (and their combinations with <ALT>, <CTRL>, and <SHIFT>), but also the arrow keys <←>, <↑>, <→>, <↓>, <Home>, <PgUp>, <PgDn>, etc.

Most important, I think, is the "index" of help items obtained by pressing one of the letter keys after <F3>. For example, pressing <F3> <D> will get a listing of the various features beginning with the letter D and the function key and keyname for that feature. Think of this as looking through the index in the back of the WordPerfect manual for help (only much faster!). Also remember that you can press <F3> twice to view a copy of the function key template on the screen.

Cursor Movement, Editing

Sometimes speeding up your work is not a matter of anything complicated, but rather quite simple. For instance, one of the best ways to make your text processing go faster is to take full advantage of the cursor movement and editing features of WordPerfect. Only rarely is it necessary to move the cursor more than 3-4 positions **one position at a time**. Note these features:

Keystroke(s)	Function
<CTRL> <←>	send cursor to start of previous word

Keystroke	Function
<CTRL> <→>	send cursor to start of next word.
<Home> <←>	send cursor to left edge of screen (or line)
<Home> <→>	send cursor to right edge of screen (or line)
Keypad <+>	send cursor one screen down.
Keypad <->	send cursor one screen up.
<CTRL> <Backspace>	delete word at or to right of cursor (if the cursor is in the space at the end of a word, it will delete that word) - I use this one ALL the time - great for typos!
<Home> <Backspace>	delete word to left of cursor
<ESC> <CTRL> <Backspace>	deletes 8 words to the right
<ALT> <F4> <.> <Backspace>	deletes to end of sentence

Using these commands seems to make writing flow more, because you aren't spending so much time waiting for the cursor to get where you want it. (Examine all the arrow keys and the <ESC> key from the help system for more information on this.)§

PC-SIG Library Updated

The Computing Center recently acquired the latest version of the PC-SIG library collection of public domain and shareware software on CD-ROM. This version of the library contains 817 diskettes full of software, information about IBM-compatible PCs, and the entire contents of the Bible.

Types of software in this collection include packages for wordprocessing, communications, business and financial record keeping and analysis, databases, and all kinds of compiler and disk management utilities. Much of this software is of high quality, and you may find that you would rather use some of these packages than those you would buy in the commercial market. If you do find something useful (or just plain enjoyable), we encourage you to send the author(s) the requested registration fee. This will help to encourage the shareware marketing concept that makes this type of software evaluation possible.

If you are interested in exploring this vast storehouse of software and information, you are welcome to come into the Computing Center Reception Area (ISB 119) and ask to see a copy of the *PC-SIG Library* book, which contains descriptions of disks 1 -

705. The Computing Center also has a listing of the contents of disks 706 - 817. The *PC-SIG Library* book can be purchased at the University Store for \$12.95.

If you would like copies of some of the PC-SIG software, please bring **formatted** blank diskettes with the PC-SIG Library diskette number on the diskette label to the Computing Center Reception Area. You are welcome to as many diskettes from this library as you want, but we recommend that for faster service you limit your requests to no more than 10 diskettes at one time. Requests for more than 10 diskettes may take several weeks to fill. §

Holiday Reading Suggestion

By Sandy Franklin, Office Automation Specialist

The December 1987 issue of *Working Woman* contains two articles that are worth taking a look at. One is entitled "Word-Processing Primer for the Hunt-and-Peck Manager," by Holloway McCandless (p. 65) and the other is "How to Tell Good Software by Its Cover," by Carolyn J. Mullins (pp. 44-48). Both articles are written for the novice computer user.

Some of the suggestions offered in the first article are:

- Make "boilerplates" of letters, memos, contracts, reports and often used chunks of text.
- Use abbreviations for often repeated terms or titles, then use search-and-replace to supply the whole word.
- Keep a list handy of your most useful keystrokes.
- "Speed-dial" frequently used combinations.
- Increase the impact of your documents with boldface, underlining, italics, and different type of styles and sizes.
- Trade secrets: spelling checkers, thesauruses, indexers and instant envelopes.

The second article suggests borrowing the software from someone and taking several hours to "rate" both the manual and the program. It provides a check list of things to look for and suggestions of "good" and "bad" features. §

Micro-Tips

This column is intended to serve as a forum for sharing useful tips on making more productive use of microcomputers. If you have a tip that you feel may be of use to campus users, submit it to the BENCHMARKS editor for possible inclusion in a future issue.

Unerasing Your Erased Files

If you work with microcomputers for any significant length of time, you will undoubtedly experience the horror of accidentally erasing a file. Even worse yet is the accidentally erased directory. Since so few of us maintain timely backups of our disks, it is imperative that you recognize how to recover from this disaster.

When you erase a file or set of files from an MS-DOS disk, you are not actually erasing the information stored on the disk. Rather, you are deleting a reference to the information that is stored on the disk's File Allocation Table (FAT). The FAT maintains a list of all files stored on the disk, along with the portions of the disk (clusters) where the associated file's information is stored. When you erase a file using the DOS **ERASE** or **DELETE** commands, you simply erase the FAT reference to that file. Since the FAT no longer references the clusters where your data is stored as being in use, the next file saved or copied may be written over your lost, but still wanted, data. Therefore, if you accidentally erase a file, **DO NOT ISSUE ANY OTHER SAVE OR COPY COMMANDS** until you have recovered it.

In order to recover the erased file, you will need to acquire an "unerase" program such as the ones found in the Norton Utilities or Mace Utilities. These packages cost less than \$100 each and include a variety of other useful utilities. They are easy to use and quite useful in averting disaster.

Academic Computing Services will be glad to assist you if you have problems recovering an erased file with an "unerase" program

DOS Tips

There are some convenient capabilities in MS-DOS for making batch file code shorter and more efficient. One of these is the **FOR ... IN** command. This allows the establishment and sequential execution of an "array" of DOS commands. An example of the use of this would be a command in a batch file to copy and erase a file at the same time, i.e. a **MOVE** command.

As a test, create a file called **MOVE.BAT** in a hard disk sub-directory which is in the **DOS PATH** (see *Benchmarks*, October, 1987). Include in this file the following command:

```
FOR %%M IN (COPY ERASE) DO %%M %1
```

Suppose you had a file named **TEST.TXT** that you wanted to move from your sub-directory called **\SOURCE** to your sub-directory called **\TARGET**. To accomplish this task, set the **\TARGET** sub-directory as the default with the **CD** command (e.g. **CD \TARGET**). Then enter:

```
MOVE \SOURCE\TEST.TXT <RETURN>
```

This will copy the file to your default directory and then erase the original. Unfortunately, you cannot use two input parameters in the batch command (e.g. **DO %%M %1 %2**), then type **MOVE \SOURCE\TEST.TXT \TARGET** to move the to the **\TARGET** directory. This usage would not erase the original copy because there are too many parameters for the **ERASE** command, resulting in a DOS error. Hence the reason for setting the target sub-directory as the default and using one input parameter.

Caution! There is no error-checking in this example, so if you have insufficient space on the target directory for the file, the copy will abort **and** the original file will be erased. §

VAXEN

How to Define Your Keypad on the VAX

By Billy Barron, VAX Operator (BILLY@NTSUVAX)

It is possible to define your VT100 keypad so that you can hit just a single key instead of having to type out commands such as DIR. If you are tired of typing and would like to do this, you first need to type (from the \$ prompt):

SET TERM/APPLICATION

This tells the VAX that you will no longer use your keypad for entering numbers, but instead you will do commands from the keypad.

To define a key, you use the **DEFINE/KEY** command. For example, if you want to define the <0> key on your keypad as the DIR command, you would type:

DEFINE/KEY KP0 "DIR"/TERM

KP0 is the <0> key on the keypad. Similarly, KP5 would be the <5> key. From this point until you logout, you could hit the <0> key on the keypad whenever you wanted a directory.

To use the 4 keys above the keypad, known as the PF keys, you would use PF1, PF2, PF3, or PF4 depending on which key you wanted.

For the <,> key on the keypad, you would use COMMA. The same applies for the MINUS <->, ENTER <ENTER>, and PERIOD <.> keys on the keypad.

/TERM means that a carriage return will be included in the command.

If you wanted the key to be defined everytime you log in, you can just add **SET TERM/APPLICATION** and all the **DEFINE/KEY** statements to your LOGIN.COM file.

For more information, type **HELP DEFINE /KEY** on the VAX or see the DCL dictionary manual, available in the public access areas.

NOTE: Microcomputer users should consult the documentation for their communications software to find its equivalent VT100 keypad functions.

UNIX and C Mailing List Available

If you have been longing to talk to someone about UNIX and/or C, now is your chance. A UNIX and C discussion mailing list is now available on the VAXcluster. It is run by a fellow named Tad Marko. Further information can be obtained by sending MAIL to IG45 (Tad's User-ID).§

Using the VAX/VMS Debugger

By Darrell Davis, VAX Operator (Darrell@NTSUVAX)

The VAX/VMS Debugger allows you to observe and manipulate your program interactively as it executes. For instance, if your program terminates prematurely, goes into an infinite loop, or outputs incorrectly, then the debugger can be used to locate such run-time errors. Some of the capabilities of the debugger are to:

- start, stop and resume program execution
- trace execution
- monitor variables
- examine variable contents, modify variables
- force events to occur

The debugger supports practically every programming language on the VAX, and recognizes the syntax, data types, etc. of each language. The debugger also allows changing from one language to another in the course of a debugging session.

Invoking the Debugger

To execute a program using the debugger you must first compile and link the program with the **/DEBUG** option, for example,

PASCAL/DEBUG/NOOPTIMIZE/LIS filename

LINK/DEBUG filename

It is a good idea to use the **/NOOPTIMIZE** option in case the compiler, by default, changes your program to make it run faster. The **/LIS** option should be used so you can have a listing to reference while debugging. You can then invoke the debugger by typing:

RUN filename

You will get the **DBG>** prompt.

Features Of The Debugger

At the **DBG>** prompt you are ready to issue a debugger command. At any time during the debugging session you may type **HELP** for online help on the debugger. The best way to view your source code while you debug it is to first issue the command,

SET MODE SCREEN

The **STEP** command can be used to execute your program by the specified number of lines.

STEP ← Executes the next line.

STEP integer ← Executes the specified number of lines.

The **SET BREAK** command is useful for selecting points where you want execution of your program to stop so that you can examine variables, check the call stack, etc.:

SET BREAK *procedure_name*

SET BREAK **%LINE** *number*

SET BREAK **%LABEL** *identifier*

The **SET WATCH** command lets you specify variables that the debugger will monitor as your program executes:

SET WATCH *variable_name*

The **SET TRACE** command issues a message when a particular procedure begins execution:

SET TRACE *procedure_name*

The **SHOW** command reminds you which commands you **SET**, just in case you forget. For example:

SHOW BREAK

SHOW WATCH

SHOW TRACE

The **CANCEL** command cancels **BREAK**, **WATCH**, **TRACE**, etc. For example:

CANCEL BREAK **%LINE** *number*

CANCEL BREAK *procedure*

CANCEL BREAK **%LABEL** *number*

CANCEL WATCH *variable_name*

CANCEL ALL

To execute your program up to the next breakpoint (or until it crashes!), use the **GO** command.

To display the values of variables, use the **EXAMINE** command:

EXAMINE *variable_name* ← Where the variable can be a string, integer or array.

EXAMINE *array(index)* ← Examine an array element.

To change the value of a variable, use the **DEPOSIT** command. Note that you must use the correct assignment statement syntax for the language that you are using (i.e. Pascal string is '='):

DEPOSIT *variable_name* = *value*

To evaluate a language expression using the operator and expression syntax of the currently set language, use the **EVALUATE** command:

EVALUATE *expression*

EVALUATE *var* + *var* ← Will display the result *var* + *var*

EVALUATE *var*/2 ← Divides *var* by 2 and displays result.

A very useful feature of the debugger is the log file. A debugger log file is a file containing every debugger command you issue during a particular debugging session. With this feature, you can set all your breakpoints, variables to watch, etc. once and then every time you need to debug the program you can execute the log file. The commands are as follows:

SET LOG ← Saves your commands to **DEBUG.LOG**

SET LOG *filename* ← Saves your commands to *filename*.

SHOW LOG ← Displays name of current log file

@logfile.log ← Executes the log file

To exit the debugger press <CTRL> <Y> or type **EXIT**

This article barely scratches the surface of the powerful VAX/VMS Debugger. The debugger can actually cut programming time in half; it leaves the guesswork out of determining what is wrong with your program.

For more information on the VAX/VMS Debugger, type **HELP** from the **DBG** prompt, or consult the *VAX/VMS Debugger Reference Manual* located in the Graphics Lab (NE corner ISB basement), at the Help Desk (ISB 110) and in the GAB 5th floor computer lab. §

Using the EDT Editor From VMS Mail

There is a simple way to evoke the standard VMS EDT editor from within VMS mail. You need only to define the following symbol within the **LOGIN.COM** file.

MA*IL = "MAIL/EDIT"

(the * is a 'wildcard' allowing the first two letters to suffice for the command).

This causes the EDT editor to be mapped to mail when sending mail or replying to mail previously sent. There are numerous advantages in doing this, as it allows the flexibility of the EDT editor to be utilized from within VMS mail. A few of the benefits are listed below:

- Previously typed lines can be edited.
- Cutting and pasting of paragraphs is easily done.
- The mail message is automatically journaled (should the system crash).
- Exterior files can be included in the message.
- Other files can be windowed.

The **EDTIN.EDT** is also automatically evoked when mail is called from within the editor, as with any edit session. §

COMPUTER JOKE OF THE MONTH

Q: How many programmers does it take to change a lightbulb?

A: None, it's a hardware problem.

ADMINISTRATIVE INFORMATION SYSTEMS

Administrative Mail and Distribution Lists

By Douglas Heruska, Documentation Specialist

Did you know that any Administrative User-ID (User-IDs beginning with a C) can have access to the Administrative Electronic Mail System? If you want to add mail to an existing COMPLETE User-ID (SIMS User), you will need to fill out a "Change ID Request Form" (pink), available from the Computing Center Reception Area, ISB 119. After this form is completed, including the appropriate signatures, it should be returned to the Computing Center for processing. You will then be able to access the Administrative Mail System.

A related issue to using the administrative mail system is the concept of distribution lists. A Mail distribution list can be set up for multiple IDs that are frequently sent mail. For example, all the individual User-ID codes within a department could be included in a distribution list. It would then be possible to send mail to everyone in the department from a single mail message.

If you need to add existing User-IDs to a distribution list or create a new distribution list, send a memo to the Computing Center stating the names and User-IDs of the people you want added and the names of the distribution lists you want created or updated. Since distribution list names must be unique, you may be asked to choose an alternate name. You can see all the current distribution lists on the Administrative Mail System by typing **LISTS** while signed-on to the Mail system. This will display the lists that are currently available. §

Staffing Additions

By Douglas Heruska, Documentation Specialist

Robert Jones, a long time Denton resident, has joined the Student Records Team as a Programmer. He is a graduate of the BCIS department at NTSU and has been working at Moore Business Systems since graduation. The Computing Center welcomes Robert back to NTSU and we are looking forward to his assistance. §

HRMIS Security Authorization

By Douglas Heruska, Documentation Specialist

The November issue of *Benchmarks* contained an article entitled "HRMIS System Status Report." The article detailed the development of the Human Resources Management Information System. HRMIS, as the article stated, is a joint effort between North Texas State University and the Texas College of Osteopathic Medicine, and is being developed in five major phases. Now that "Phase I" (employee maintenance) is complete, people are beginning to inquire about access to HRMIS.

HRMIS has a built in security system that makes it necessary for each User-ID to be individually authorized for use. People who have a current administrative User-ID must complete a "HRMIS Security Authorization Form" in order to access the HRMIS System. All faculty and staff that use the old **REFF** access program to obtain information will want to complete this form so that they can request access to the **GENREF** model. If you believe you need access to more information than is contained in the **GENREF** model, you should request the appropriate model through your supervisor.

New users (people who do not currently have a User-ID) will, for the time being, have to complete both the "User-ID Request Form (F-020-01)" and the "HRMIS Security Form" in order to use the HRMIS System. In the near future, requests for HRMIS access will be incorporated into the "User-ID Request Form."

If you are interested in applying for a User-ID on the HRMIS system, you can obtain a "HRMIS Security Form" from the Computing Center Reception Area, ISB 119, or the Personnel Office, Marquis Hall 150. Instructions for completing the form are contained on the form itself. The completed form can be returned to either the Computing Center or the Personnel Office.

OPERATIONS

NAS/8083 Dual Processor Performance Statistics for October

CPU	SYSTEM	Scheduled Operating Hours	Planned Maintenance Hours	Planned Production Hours	Unplanned Maintenance Hours	Production Hours Achieved	System Uptime
ACAD	VM/SP3	744	2.52	741.48	0.15	741.33	99.9%
ACAD	MUSIC/SP	744	36.33	707.67	1.49	706.18	99.8%
ACAD	MVS/JES2	744	3.13	740.87	1.55	739.32	99.8%
ACAD	COMPLETA	744	3.43	740.57	2.70	737.87	99.6%
ADMN	MVS/JES2	744	2.57	741.43	0.60	740.83	99.9%
ADMN	COMPLETA	280	0.00	280.00	3.80	276.20	98.6%
ADMN	ADABASA	744	17.27	726.73	1.52	725.21	99.8%

System Uptime = (Production Hours Achieved) / (Planned Production Hours)

Production Hours Achieved = (Planned Production) - (Unplanned Maintenance)

Scheduled Operating Hours = (Planned Maintenance) + (Planned Production)

MUSIC/SP Planned Maintenance Hours include 23.42 hours for system backup and 10.11 hours for VM/SP3 system backup.

ADABASA'S Planned Maintenance Hours include 14.45 hours for system backup.

The ACAD CPU achieved 100% uptime; the NAS/7360 DASD achieved 100% uptime; the NAS/7380 DASD achieved 100% uptime. The ADMN CPU achieved 100% uptime; the NAS/7360 DASD achieved 100% uptime; the NAS/7380 DASD achieved 100% uptime.

Lost productivity is calculated as the greatest amount of elapsed time that any one of the production systems was unavailable for scheduled operation. Lost productivity hours were contributed to by the key causes appearing in the tables below.

ADMN CPU:

CPU, Tape, and Disk Subsystems (NAS)

1. Microcode upgrade in 8063 uniprocessor. 2.60 HOURS

Miscellaneous

1. Undetermined causes for systems restarts. 0.30
 2. MVS/JES2 system tuning/improvements. 1.22
 3. Reset CPU clock to standard time. 0.22
 4. COMPLETA system tuning/improvements. 1.08
 5. COMPLETA system down to process single jobs. 1.97
 TOTAL: 4.79 HOURS
 GRAND TOTAL FOR ADMN: 7.39 HOURS

ACAD CPU:

CPU, Tape, and Disk Subsystems (NAS)

1. Microcode upgrade in 8063 uniprocessor. 2.93 HOURS
 2. F.E. left DASD inhibited after maintenance. 0.91

Miscellaneous

1. Undetermined causes for systems restarts. 0.58 HOURS
 2. Inadvertent shut down of MUSIC. 0.50
 3. COMPLETA system tuning/improvements. 0.65
 4. Reset CPU clock to standard time. 0.50
 5. MVS/JES2 system tuning/improvements. 0.70
 TOTAL: 2.93 HOURS
 GRAND TOTAL FOR ACAD: 6.77 HOURS

Disk Backup Schedules

Backup Schedule for OS/MVS

OS/MVS disk packs (academic and administrative) are backed up daily, Tuesday through Saturday, from 4-6:30 a.m., and Sunday from Midnight to 3 a.m. A backup of all the operating systems on the NAS CPU and their contents is done once every two weeks at some low activity period over a weekend.

MUSIC/SP Backup Hours

A message will be sent to all users signed on to MUSIC/SP approximately 10 minutes before backups are begun. It will be in the form ****MUSIC SHUT DOWN AT xxxx AM-SCHEDULED BACKUP****. To find out the backup hours while signed on to MUSIC/SP, enter **HELP HOURS**. The following backup schedule is currently in effect:

Tuesday 3 a.m. (for about 3 hours) Weekly backup
 Wednesday - Saturday 4 a.m. (for about 2 hours) Daily backup
 Saturday Midnight (for about 2 hours) Daily backup

PHOENIX Backup Schedule

PHOENIX is backed up weekly on Sunday night. The backup begins at midnight and lasts for approximately 30 minutes.

VAX Backup Schedule

Incremental backups of the VAXcluster are performed Monday through Thursday at 6 p.m. Users do not have to log-off, but any files that are open at the time of the backup will **NOT** be backed up.

Full backups of both systems are done every Friday beginning at 8 a.m. These generally will take all day to complete. Again, users do not have to log-off, but any files that are open will not be backed up.

A "Stand Alone" backup of the system disk is done once every two months. This procedure makes a copy of the system disk that can be used to restore its contents if the disk is completely destroyed. The system will be shut-down for this. Watch the system log-on message for specific times and dates. **NOTE:** Requests for restoration of files should be made via MAIL to the username OPERATOR. Your file can only be restored if it existed before the last backup was done. §

TECHNICAL SUPPORT

ACADemic (NAS) Program Hit Parade*

The following programs were used the most frequently on the NAS CPU during the month of October.

OCTOBER TOP TEN PROGRAMS : FREQUENCY OF RUNS

Program	Description	Number of Runs	Percent of Total
1. IEWL	Linkage Editor	18526	17.0
2. PGM = *.DD	Compiled Program	16669	15.3
3. IKFCBL00	VS COBOL Compiler	15459	14.2
4. IEBGENER	IBM Utility	14210	13.1
5. IEV90	Assembler H	6608	6.1
6. PTPCH	Dataset Lister	4892	4.5
7. SCRIPT	Waterloo/SCRIPT	4859	4.5
8. ADARUN	ADABAS Utility Module	4466	4.1
9. IEFBR14	IBM Null Utility	4324	4.0
10. SASLPA	SAS	4252	3.9

OCTOBER TOP TEN PROGRAMS: CPU SECONDS USED

Program	Description	CPU Seconds	Percent of Total
1. SASLPA	SAS	20189	18.8
2. IKFCBL00	VS COBOL Compiler	19279	18.0
3. PGM = *.DD	Compiled Program	10797	10.1
4. SCRIPT	Waterloo/SCRIPT	9425	8.8
5. SPSSX	SPSSX	8555	8.0
6. PTPCH	Dataset Lister	8300	7.7
7. IEV90	Assembler H	5604	5.2
8. ADARUN	ADABAS Utility Module	3798	3.5
9. IEWL	Linkage Editor	3381	3.2
10. IEBGENER	IBM Utility	3043	2.8

* ACAD is the official designation of the part of the NAS/8083 CPU that is dedicated to faculty and student use. The portion of the computer reserved for University administrative purposes is termed ADMN. §

THE CHRISTMAS PAGE

'Twas the Night Before Implementation

From NutWorks, Issue 14, (Volume III, Number 2),
December, 1986. Submitted by Wildebeest (33000003@UNFVM)

'Twas the night before implementation and all through the house,
Not a program was working not even a browse.
The programmers hung by their tubes of despair,
with hope that a miracle would soon be there.
The users were nestled all snug in their beds,
while visions of inquires danced in their heads.
When out of the machine room there arose such a clatter,
I sprang from my desk to see what was the matter.
And what to my wondering eyes should appear,
but a super programmer, (with a six-pack of beer).
His resume glowed with experience so rare,
he turned out great code with a bit-pusher's flair.
More rapid than eagles, his programs they came,
and he cursed and muttered and called them by name.
On update! on add! on inquiry! on delete!
on batch jobs! on closing! on functions complete!
His eyes were glazed over, fingers nimble and lean,
from weekends and nights in front of the screen.
A wink of his eye, and a twitch of his head,
soon gave me to know I had nothing to dread.
He spoke not a word, but went straight to his work,
turning spec's into code; then turned with a jerk;
And laying his finger upon the "ENTER" key,
the system came up and worked perfectly.
The updates updated, the deletes, they deleted;
the inquiries inquired, and closings completed.
He tested each whistle, and tested each bell
with nary an abend, and all had gone well.
The system was finished, the tests were concluded.
the user's last changes were even included.
And the user exclaimed with a snarl and a taunt,
"It's just what I asked for, but not what I want!"

Richard Harris, Associate Vice President for Computing
Claudia Lynch, *Benchmarks* Editor
Steve Minnis, Manager, Computing Services

'Twas the Night Before Christmas in Texas, You Know

Author Unknown

'Twas the night before Christmas in Texas, you know
Way out on the prarie without any snow.
Asleep in their cabin were Buddy and Sue.
A-dreamin' of Christmas like me and like you.
Not stockings, but boots at the foot of their bed,
For this was in Texas, what more need be said?
When all of a sudden from out the still night
There came such a rukus it gave me a fright.
And I saw 'cross the prarie like a shot of a gun . . .
A loaded up buckboard come on at a run.
The driver was geeing and hawing with will
The horses not reindeer he drove with such skill.
Come on there Buck, Pancho and Fritz to the right.
There'll be plenty of traveling for you all tonight.
The driver in Levis and a shirt that was red
Had a ten gallon Stetson on top of his head.
As he stepped from his buckboard he was really a sight
With his Levis and Stetson and red shirt so bright.
As he burst in the cabin the children awoke
And both so astonished that neither one spoke.
And he filled up their boots with such presents galore
That neither could think of a single thing more.
And when Buddy recovered the use of his jaws
He asked in a whisper "Are you Santa Claus?"
Am I the real Santa, well what do you think?
And he smiled as he gave a mysterious wink.
Then he leaped in his buckboard and called in his drawl
To the children of Texas,
MERRY CHRISTMAS, YOU ALL!

Since this is the holiday season, it seemed appropriate to publish a few modified versions of " 'Twas the Night Before Christmas." I welcome parodies of this sort, should you desire to send them to me. - Ed.

David Molta,
Acting Manager of Academic Computing Services
Coy Hoggard,
Manager of Administrative Information Systems

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